

What is Claimed:

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1. A surgical instrument comprising:
an instrument handle;
a tubular sleeve projecting from the instrument handle;
a plastic optic fiber extending through the handle and the sleeve to a
5 distal end portion that projects from the sleeve, the distal end portion of the optic fiber
having an adjustable bend therein.
 - 112 12 2. The instrument of Claim 1, further comprising:
the distal end portion of the optic fiber is retractable into the sleeve.
 3. The instrument of Claim 1, further comprising:
the sleeve projects straight from the handle and the distal end portion
of the optic fiber bends relative to the sleeve as it projects from the sleeve.
 - 112 12 4. The instrument of Claim 1, further comprising:
the sleeve is a rigid tube that projects from the handle and the distal
end portion of the optic fiber has a preformed bend that is straightened when the
distal end portion is retracted into the tube of the sleeve and bends when the distal
5 end portion is extended from the tube of the sleeve.
 5. The instrument of Claim 1, further comprising:
the handle has a mechanism that is connected to the sleeve and
selectively moves the sleeve between pushed forward and pulled back positions of
the sleeve relative to the handle.
 6. The instrument of Claim 5, further comprising:
the optic fiber is held stationary relative to the handle and in the
pushed forward position of the sleeve the distal end portion of the optic fiber is
entirely contained in the sleeve and in the pulled back position of the sleeve the distal
5 end portion of the optic fiber projects from the sleeve.
 7. The instrument of Claim 1, further comprising:
a hollow interior bore extends through the optic fiber.

103 8. The instrument of Claim 1, further comprising:
the distal end portion of the optic fiber is formed of a thermoplastic and
is pre-bent at an angle.

7 9. The instrument of Claim 1, further comprising:
the optic fiber is the only optic fiber that passes through the handle
and the sleeve.

1 10. The instrument of Claim 1, further comprising:
the instrument is an illuminating probe.

112 11. The instrument of Claim 1, further comprising:
(the plastic) is polymethylmethacrylate.

8 12. The instrument of Claim 1, further comprising:
the tubular sleeve has an interior surface and there is an air gap
103 between the sleeve interior surface and the optic fiber in the sleeve.

1 13. The instrument of Claim 1, further comprising:
the tubular sleeve has an interior surface and a layer of sliding
material between the sleeve interior surface and the optic fiber in the sleeve.

103 14. The instrument of Claim 13, further comprising:
the layer of sliding material is located in only a portion of the sleeve
creating an air gap between the sleeve interior surface and the optic fiber where the
layer of sliding material is not located.

103 15. A surgical instrument comprising:
an instrument handle;
a tubular sleeve projecting from the handle;
a plastic optic fiber extending through the handle and the sleeve to a
5 distal end portion of the fiber; and
Enh a mechanism on the handle and connected to the sleeve to selectively
move the sleeve between a pushed forward position of the sleeve where the sleeve
projects a first distance from the handle and a pulled back position of the sleeve

10 where the sleeve projects a second distance from the handle that is less than the first distance.

15 16. The instrument of Claim 15, further comprising:
the optic fiber is secured stationary to the handle and a distal end
portion of the optic fiber projects from the sleeve when the sleeve is moved to the
pulled back position and the distal end portion of the optic fiber is entirely contained
5 in the sleeve when the sleeve is moved to the pushed forward position.

5 17. The instrument of Claim 16, further comprising:
the distal end portion of the fiber has a bend formed therein.

10 18. The instrument of Claim 15, further comprising:
a hollow interior bore extends through the optic fiber.

15 19. The instrument of Claim 15, further comprising:
the distal end portion of the optic fiber is formed of a thermoplastic and
is pre-bent at an angle.

20 20. The instrument of Claim 15, further comprising:
the sleeve is a rigid tube that projects from the handle and the distal
end portion of the optic fiber has a preformed bend that is straightened when the
distal end portion is retracted into the tube of the sleeve and bends when the distal
5 end portion is extended from the tube of the sleeve.

21. The instrument of Claim 15, further comprising:
the sleeve projects straight from the handle and the distal end portion
of the optic fiber bends relative to the sleeve as it projects from the sleeve.

15 22. The instrument of Claim 15, further comprising:
the optic fiber is the only optic fiber that passes through the handle
and the sleeve.

15 23. The instrument of Claim 15, further comprising:
the plastic is polymethylmethacrylate.

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